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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/380,412	01/19/2000	PATRIK LJUNGSTROEM	RIEB3.001APC	2586

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EXAMINER

MEHRPOUR, NAGHMEH

ART UNIT	PAPER NUMBER
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2686

DATE MAILED: 05/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/380,412

Applicant(s)

PATRICK LJUNGSTROEM

Examiner

Naghmeh Mehrpour

Art Unit

2686

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 12 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 12-20, 22, 25**, are rejected under 35 U.S.C. 103(a) as being unpatentable over Schellinger et al. (US Patent Number 6,360,091 B1) in view of Sawyer et al. (US Patent Number 6,134,438) and Masuda et al. (US Patent Number 5,748,621) in further view of Becher et al. (US Patent Number 5,617,467).

Regarding **Claims 12-13, 20**, Schellinger teaches a cordless communication system for the operation of a mobile terminal of a **cellular** communication system with a base station that is connected to a public fixed network and that is compatible at an air interface with the mobile communication system that has at least one authentication function cordless communication system (col 3 lines 32-40) comprising:

Schellinger fails reading and writing from to, at least one a first identification module, wherein sections of data of the identification module through, wherein the section of the first **subscriber identity** module (mobile) used in the base station is identical to the section of a second **subscriber identity** module of a mobile authorized to access the public cellular communication system;

Art Unit: 2686

processing data read from the first **subscriber identity** module through software implemented in the base station, using a random number generated at the base station, so as to generate a first authentication result;

processing data read from the second **subscriber identity** module, using the random number generated at the base station, so as to generate a second authentication result;

authenticating the mobile terminal with regard to the base station through the first authentication result and the second authentication result; wherein the base station fulfills the same functions and tasks with respect to access control and authentication as the home location register, and respectively, the authentication center of **public cellular** communication system, and wherein the authentication is performed without accessing a home location register in **the public cellular** communication system.

Sawyer teaches a mobile communication system comprising:

at least one a first identification module, wherein sections of data of the identification module through, wherein the section of the first identification module (mobile) (col 4 lines 23-50) used in the base station is identical to the section of a second identification module of an access-authorized mobile terminal (col 4 lines 23-50);

processing data read from the first identification module through software implemented in the base station, using a random number generated at the base station, so as to generate a first authentication result (col 8 lines 23-42);

authenticating the mobile terminal with regard to the base station through the first authentication result and the second authentication result (col 4 lines 23-50);

Art Unit: 2686

wherein the base station fulfills the same functions and tasks with respect to access control and authentication as the home location register (col 4 lines 23-50), and respectively, the authentication center of the mobile communication system, and wherein the authentication is performed without accessing a home location register in a mobile communication system (see figure 1, col 4 lines 23-50). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the above teaching Sawyer with Schellinger cordless Base Station, in order to provide a system, which allows use of the common local control features.

Schellinger modified by Sawyer fails to that the processing data read from the second identification module, using the random number generated at the base station, so as to generate a second authentication result. However, Masuda teaches a method of processing data read from the second identification module, using the random number generated at the base station, so as to generate a second authentication result (col 8 lines 23-32). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the above teaching Masuda with Schellinger cordless Base Station modified by Sawyer systems, in order to provide authentication method which does not require any means for storing an authentication random number corresponding each mobile station and also provide an advance authentication calculation result.

Schellinger modified by Sawyer and Masuda does not specifically mention a read/write unit exists within the base station configured to read and write information from/to, and processing data read from the identification module through software implemented in the base station.

However Bacher teaches a read/write unit within a Base Station, is configured to read/write information from/to, and processing data read from the identification module through software implementing in the base station (col 5 lines 45-55). Using readable/writable memory instead of readable memory within the base station provides more variety to the user, for example enabling the user to use multiple handsets with one base. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the above teaching of Bacher with Schellinger cordless Base Station modified by Sawyer and Masuda, in order to provide more flexibility for the wireless communication system.

Regarding **Claim 14**, Schellinger teaches a method further comprising storing other data on the **subscriber identity** module and the other data including allowed frequencies, a maximum permitted output powers for the base station and the mobile terminal, allowed services, and initialization parameters which a network carrier desires to influence and which constitute a general framework for the operation of the base station of the cordless communication system (page 3 section 0043).

Regarding **Claims 15-16**, Schellinger teaches a method comprising operating the base station of the cordless communication system so that the air interface operates in a frequency spectrum of a public **cellular** communication system (col 3 lines 60-66).

Regarding **Claims 17-19**, Schellinger teaches a method of communication that comprise a timer within the base station to a predetermined time by a network carrier, and automatically resetting

Art Unit: 2686

the timer by a subscriber if an authorized use occurs, wherein the base station, if not used after the predetermined time has lapsed, loses authorization to operate a transmitter at frequencies assigned to the **cellular** communication system (col 8 lines 1-10).

Regarding **Claim 22**, Schellinger modified by Sawyer and Bacher fails to teach a cordless communication system wherein the predetermined standard is selected from the group consisting of ISO ID-1, ID-000, DCS 1800, and PCS 1900. However Examiner takes official notice that a cordless communication system wherein the predetermined standard is selected from the group consisting of ISO ID-1, ID-000, DCS 1800, and PCS 1900 is well known in the art. Therefore, it have been obvious to one of ordinary skill in the art at the time of the invention to use above teaching to Schellinger modified by Sawyer and Bacher, in order to provide a system that can be operational with in a variety of different networks.

Regarding **claim 25**, Schellinger teaches a cordless communication system for the operation of a mobile terminal of a mobile communication system with a base station that is connected to a public fixed network and that is compatible at an air interface with the **cellular** communication system 107 (see figure 1) that has at least one authentication function cordless communication system (col 3 lines 60-66). Schellinger fails to teach:

reading and writing from and to, respectively, at least a first identification module through a read and write unit of the base station, wherein sections of data of the first identification module used in the base station are identified to sections of data stored on a second identification module of an access-authorized mobile terminal;

Art Unit: 2686

processing data read from the first identification module through software implemented in the base station, using a random number generated at the base station, so as to generate a first authentication result;

processing data read from the second identification module, using the random number generated at the base station, so as to generate a second authentication result;

authenticating the mobile terminal with regard to the base station through the first and the second authentication result such that the mobile terminal authenticates directly with the base station, wherein the base station fulfills the same functions and tasks with respect to access control and authentication as a home location register and, respectively, and authentication center of the mobile communication system, and

operating the mobile through the public fixed network if the authentication has been successful, and wherein the authentication is performed without accessing a home location register in a mobile communication system.

However Sawyer teaches processing data read from the first identification module through software implemented in the base station, using a random number generated at the base station, so as to generate a first authentication result (col 6 lines 38-67);

authenticating the mobile terminal with regard to the base station through the first and the second authentication result such that the mobile terminal authenticates directly with the base station, wherein the base station fulfills the same functions and tasks with respect to access control and authentication as a home location register and, respectively, and authentication center of the mobile communication system (col 6 lines 38-67); and

Art Unit: 2686

operating the mobile through the public fixed network 107 (see figure 1) if the authentication has been successful, and wherein the authentication is performed without accessing a home location register in a mobile communication system (col 4 lines 23-50). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the above teaching Sawyer with Schellinger cordless Base Station, , in order to provide a system, which allow use of the common local control features.

Schellinger modified by Sawyer fails to that the processing data read from the second identification module, using the random number generated at the base station, so as to generate a second authentication result. However, Masuda teaches a method of processing data read from the second identification module, using the random number generated at the base station, so as to generate a second authentication result (col 8 lines 23-32). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the above teaching Masuda with Schellinger cordless Base Station modified by Sawyer systems, in order to provide authentication method which does not require any means for storing an authentication random number corresponding each mobile station and also provide an advance authentication calculation result.

Schellinger modified by Sawyer does not specifically mention a read/write unit exists within a base station configured to read and write information from/to, and processing data read from the identification module through software implemented in the base station.

However Bacher teaches a read/write unit within a base station configured to read/write information from/to, and processing data read from the identification module through software implemented in the base station (col 5 lines 45-55). Using readable/writable memory instead of

Art Unit: 2686

readable memory within the base station, provides more variety to the user, for example enabling the user to use multiple handsets with one base. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the above teaching of Bacher with Schellinger cordless Base Station modified by Yogi, in order to provide more flexibility for the wireless communication system.

3. **Claims 21, 23-24**, are rejected under 35 U.S.C. 103(a) as being unpatentable over Schellinger et al. (US Patent Number 6,360,091), Sawyer et al. (US patent Number 6,143,438) and Masuda et al. (US Patent Number 5,748,621), in view of Bacher et al. (US Patent Number 5,617,467) in further view of Parker et al. (US Patent 6,167,271).

Regarding **Claim 21**, Schellinger modified by Sawyer, Masuda and Baker fails to teach that the wireless communication system wherein the first **subscriber identity** module is a chip card configured for a predetermined standard. However Parker teaches a system reading and writing from and to, respectively, at least a first subscriber identity module (SIM) card through a read and write unit of the base station, wherein sections data of the first SIM used in the base station are identical to sections of data stored on a second SIM card of an access authorized mobile terminal (col 9 lines 60-67, col 10 lines 1-10). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the above teaching of Parker with Schellinger cordless Base Station modified by Sawyer, Masuda and Baker, in order to provide converting mobility events in the wired telephone system to cellular network signaling, and

Art Unit: 2686

standard interfaces for analog and ISDN BRI telephone sets, so the subscriber may be able to use their existing telephone sets.

Regarding **Claims 23-24**, Schellinger modified by Sawyer, Masuda and Bacher fails to teach an apparatus/method of a cordless communication system wherein the mobile identification module is a chip card. However Parker teaches a system reading and writing from and to, respectively, at least a first subscriber identity module (SIM) card through a read and write unit of the base station, wherein sections data of the first SIM used in the base station are identical to sections of data stored on a second SIM card of an access authorized mobile terminal (col 9 lines 60-67, col 10 lines 1-10). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the above teaching of Parker with Schellinger cordless Base Station modified by Sawyer, Masuda and Bacher, in order to provide converting mobility events in the wired telephone system to cellular network signaling, and standard interfaces for analog and ISDN BRI telephone sets, so the subscriber may be able to use their existing telephone sets.

4. **Claim 26**, is rejected under 35 U.S.C. 103(a) as being unpatentable over Schellinger et al. (US Patent Number 6,360,091 B1) in view of Sawyer et al. (US Patent Number 6,134,438) in further view of Becher et al. (US Patent Number 5,617,467).

Regarding **Claim 26**, Schellinger teaches a system for the operation of a mobile terminal of a mobile communication system with a base station that is connected to a public fixed network and

Art Unit: 2686

that is compatible at an air interface with the **public cellular** communication system 107 that has at least one authentication function cordless communication system (see figure 1, col 6 lines 56-67, col 3 lines 32-40) comprising:

Schellinger fails to teach a system wherein transmitting a specific identification periodically from the base station to indicate presence and readiness for operation during a stand by mode;

Reading and writing from and to sections of data of the first identification module of the base station, wherein sections of data of the first identification module used in the base station are identical to sections of data on a second identification module of mobile terminal authorized to **access the public cellular communication system**;

processing data read from the identification module through software implemented in the base station, so as to generate a first authentication result;

processing data read from the second identification module (base station), generated at the base station, so as to generate a second authentication result;

authenticating the mobile terminal with regard to the base station through the first authentication result (mobile) and the second authentication result , wherein the base station fulfills an access-authorized mobile terminal, wherein the base station fulfills the same functions and tasks with respect to access control and authentication as the home location register, and respectively, the authentication center of the mobile communication system, and wherein the authentication is performed without accessing a home location register in a mobile communication system.

Examiner takes official notice that transmitting a specific identification periodically from the base station to indicate presence and readiness for operation during a stand by mode is well

Art Unit: 2686

known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the above teaching with Schellinger, in order to provide more flexibility for the wireless communication system.

However Sawyer teaches a system wherein sections of data of the first identification module of the base station, wherein sections of data of the first identification module used in the base station are identical to sections of data on a second identification module of **mobile terminal authorized to access the public cellular communication system** (col 4 lines 23-50);

processing data read from the identification module through software implemented in the base station, so as to generate a first authentication result (mobile) (col 4 lines 23-50);

processing data read from the second identification mobile, generated at the base station, so as to generate a second authentication result (col 4 lines 23-50);

authenticating the mobile terminal with regard to the base station through the first authentication result (mobile) and the second authentication result, wherein the base station fulfills an access-authorized mobile terminal (col 6 lines 50-67), wherein the base station fulfills the same functions and tasks with respect to access control and authentication as the home location register, and respectively, the authentication center of the mobile communication system, and wherein the authentication is performed without accessing a home location register in a mobile communication system (col 4 lines 23-50).

Schellinger modified by Sawyer fails to teach a read/write unit within a base station, which is configured to read and write information from and to, and processing data read from the identification module through software implemented in the base station. However Bacher teaches a read/write unit within a base station configured to read and write information from and to, and

Art Unit: 2686

processing data read from the identification module through software implemented in the base station (see figure 1, read/write memory col 5 lines 45-55). Using readable/writable memory instead of readable memory within the base station, provides more variety to the user, for example enabling the user to use multiple handsets with one base. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the above teaching of Bacher with Schellinger modified by Sawyer, in order to provide more flexibility for the wireless communication system.

5. **Claim 27**, is rejected under 35 U.S.C. 103(a) as being unpatentable over Parker et al. (US Patent 6,167,271) in view of Masuda et al. (US patent Number 5,748,621).

Regarding **claim 27**, Parker teaches a system for the operation of a mobile terminal of a mobile communication system with a base station that is connected to a public fixed network (col 8 lines 2-4) and that is compatible at an air interface with the **cellular** communication system that has at least one authentication function cordless communication system (col 1 lines 44-63, col 7 lines 51-60) comprising:

reading and writing from and to, respectively, at least a first subscriber identity module (SIM) card through a read and write unit of the base station, wherein sections data of the first SIM used in the base station are identical to sections of data stored on a second SIM card of mobile terminal **authorized to access the cellular communication system** (col 9 lines 60-67, col 10 lines 1-10).

Art Unit: 2686

Parker fails to teach processing data read from the first SIM card through software implemented in the base station to generate a first authentication result;

authenticating the mobile terminal with regard to the base station through the first authentication result (mobile) and the second authentication result (base station), wherein the base station fulfills an access-authorized mobile terminal, wherein the base station fulfills the same functions and tasks with respect to access control and authentication as a home register and, wherein the base station fulfills the same functions and tasks with respect to access control and authentication as the home location register, and respectively, the authentication center of the mobile communication system wherein the authentication is performed without accessing a home location register in a mobile communication system; and

operating the mobile terminal through the public fixed network if the authentication has been successful.

However Sawyer teaches processing data read from the first identification module through software implemented in the base station to generate a first authentication result (col 8 lines 23-42);

authenticating the mobile terminal with regard to the base station through the first authentication result (mobile) and the second authentication result, wherein the base station fulfills an access-authorized mobile terminal (col 4 lines 23-50), wherein the base station fulfills the same functions and tasks with respect to access control and authentication as a home register and, wherein the base station fulfills the same functions and tasks with respect to access control and authentication as the home location register (col 4 lines 23-50), and respectively, the authentication center of the mobile communication system wherein the authentication is

Art Unit: 2686

performed without accessing a home location register in a mobile communication system (col 8 lines 23-80); and

operating the mobile terminal through the public fixed network if the authentication has been successful(col 4 lines 23-50). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the above teaching of Sawyer with Parker, in order to provide a digital mobile communication system which can synchronize timings to start a personal station-to-personal station direct communication, and can improve the efficiency of using a frequency by eliminating time when communications cannot be made.

Response to Arguments

6. Applicant's arguments with respect to claims 1-27 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 2686

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any responses to this action should be mailed to:

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Naghmeh Mehrpour whose telephone number is 571-272-7913.

The examiner can normally be reached on 8:00- 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold be reached (571) 272-7905.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NM

May 6, 2005

Marsha D Banks-Harold
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